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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,399	07/21/2003	Vladimir Mordekhay		6811

7590

07/08/2005

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EXAMINER

GORDON, BRIAN R

ART UNIT PAPER NUMBER

1743

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/624,399

Applicant(s)

MORDEKHAY, VLADIMIR

Examiner

Brian R. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10-15-05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 and 34-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16, 28, and 30 is/are rejected.
- 7) ☒ Claim(s) 17-27, 29 and 31-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-21-03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group II, claims 9-33 in the reply filed on October 15, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities: The application numbers in the specification are missing on pages 1 and 5.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the handling means is "grippers" or "a storage cassette". If the grippers were chosen those claims directed to the storage cassette would not be further

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limiting. Therefore a reference teaching the grippers would also apply to those following claims directed to the storage cassette is not a definite requirement of the claim.

Claim 15 recites "a groups consisting of an electronic smart chip device and a cylindrical body with at least one flat side and a cylindrical side wall..." The word "groups" should be group. It is unclear if applicant intends for both the chip device and cylindrical body to further comprise a flat side and side wall as claimed. For the purpose of examination, the examiner assumes the flat side and side wall are characteristics of the cylindrical body. Therefore a reference meeting the limitation of the chip device would also meet the limitation of subsequent claims directed to the cylindrical body which is not a definite requirement of the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 9, 28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Frazier US 6,726,820.

Frazier discloses microdevices (plurality of sample medium carriers), such as those used in the pharmaceutical and biotechnological fields, including an integrated memory. According to various embodiments, the integrated memory is readable,

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writable, and rewritable. The present invention further provides processing stations, e.g., for carrying out electrophoresis, pcr, genetic analysis, sample preparation, and/or sample cleanup, etc., that are capable of reading from and/or writing/rewriting to such memory.

As seen in Figure 1, a microdevice 10 comprises a substrate (or body, sample plate) 12 in which sample chambers 14 and channels 16 are formed (e.g., microfabricated), with a chamber or reservoir provided in fluid communication with each end of each channel.

The memory region 18 (electronic smart chip) of a microdevice 10 can be configured so as to be insertable into a reader-writer unit 22 (carrier body with complementary engagement means). The reader-writer unit 22 can be adapted for communication with a computing device (central processing unit), such as shown at 24, via a USB or FireWire connection 26. The memory can be written to before, during and/or after processing.

The processing station 28 can include integrated computing capabilities 32 programmed for receiving and processing data (alternatively, or in addition, the station 28 can be operably linked to an external computing device, such as a Macintosh or PC, and/or to a display-capable input-output device). In the illustrated embodiment, a human interface device is provided comprising an externally accessible keypad input/output unit with an LCD display, shown at 38. A variety of information, such as results or output generated from use of the station, can then be written to the integrated memory 18 of the microdevice 10. If desired, the microdevice can be transported to another computer,

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computing-capable processing station, or other desired location, where the stored information can be accessed, etc. Certain embodiments contemplate storing the microdevice in a safe place, so as to archive information held in the integrated memory.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier as applied to claims 9, 28 and 30 above, and further in view of Ganz et al. US 6,637,473.

Frazier et al. does not disclose grippers or a storage cassette.

Ganz et al. disclose a device and method for the automated storage and retrieval of trays holding subject matter. A plurality of trays is inserted into an access device. A computer system is programmed to control a storage gantry to move the trays between the access device, a storage rack (cassette) and a work cell gantry. The computer

system is also programmed to control the work cell gantry to move the subject matter to and from an automated receiving machine.

The device comprises a gripper for transporting micro-well plates from the storage rack to the work cell gantry.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Frazier et al by employing the robotic grippers of Ganz et al. in order to automatically move the microdevices from a storage rack to the work station in order to reduce the amount of manual interaction required.

***Allowable Subject Matter***

11. Claims 17-27, 29, and 31-33 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach nor fairly suggest memory means comprises a cylindrical body with at least one flat side and a cylindrical side wall, one of said first input/output contacts of said memory means comprising said side wall and another of said first input/output contacts of said memory means comprising said at least one flat side, at least two different gripping mechanisms and wherein said engagement means of said carrier body comprises at least two sets of different openings for interaction with said at least two different gripping mechanisms, and a removable protective shield insertable into said recess of said carrier body as an

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additional means for protecting said samples and said sample-carrying medium from contamination.

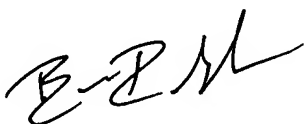
***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsushita; Hajime et al.; Yamazaki; Hajime et al.; Naccarato; Frank et al.; Ruddock, Trevor; Eggers, Mitchell D.; Bevirt, JoeBen et al.; Stylli; Chari et al.; and Koster; Hubert et al. disclose processing devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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